

Archeological Evaluation of Proposed Improvements
Grandview Sandbar and Army Camp
New River Gorge National River
Raleigh and Fayette Counties, West Virginia



Allen H. Cooper
National Park Service
Chesapeake and Allegheny System Support Office
Philadelphia, Pennsylvania

David G. Orr
National Park Service
Valley Forge Center for Cultural Resources
Valley Forge, Pennsylvania

Management Summary

Archeological testing at the location of proposed improvements at Grandview Sandbar and Army Camp resulted in the identification of a new archeological site at the east margin of the Grandview Sandbar development area. The site, identified by lithic debris, is buried beneath a colluvial deposit which is sufficiently thick to preserve it in place with the exception of the proposed eastern comfort station. Potential impacts to this site should be avoided by relocating the proposed comfort facility westward to an area previously impacted by surface mining. Relocation will result in “no effect” on archeological resources for the development project. This site should be evaluated for eligibility to the National Register at a later date. No archeological resources were identified within the proposed development area at Army Camp.

Introduction

New River Gorge National River proposes the construction of campground improvements at Grandview Sandbar and Army Camp (Figure 1). Improvements will consist of new camping pads, constructed by adding fill soils to the existing surfaces, and construction of three comfort stations at Grandview Sandbar (Figure 2) and one at Army Camp (Figure 3). The comfort stations will measure 20 by 30 feet with ground disturbances up to the depth of five feet.

Under the provisions of the *National Historic Preservation Act of 1966* (Public Law 89-665) and the *Programmatic Agreement among the National Park Service, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers*, the locations of the proposed improvements were archeologically evaluated to assess their effects on unknown archeological resources. These investigations were conducted between March 17 and 19, 1997 by National Park Service staff from New River Gorge National River, the Valley Forge Center for Cultural Resources, and the Chesapeake and Allegheny System Support Office. Responsible parties met the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*. All materials associated with these investigations will be curated at the park within the standards of *36 CFR Part 79 Curation of Federally Owned and Administered Archeological Collections*, and the National Park Service's *Museum Handbook*.

Investigations proceeded in accordance to the West Virginia Division of Culture and History's *Guidelines for Phase I Surveys, Phase II Mitigation and Cultural Resource Reports*. All excavation units were of uniform size. Excavation proceeded by natural stratigraphy with all potentially cultural soils passed through one-quarter inch hardware cloth for uniform recovery of cultural materials. Soil colors were described by reference to the Munsell Color scheme. All recovered artifacts were placed in plastic bags in the field by provenience and analyzed by reference to common typologies for prehistoric materials. Significant profiles and overall views were photographically recorded and integrated with the project's collection.

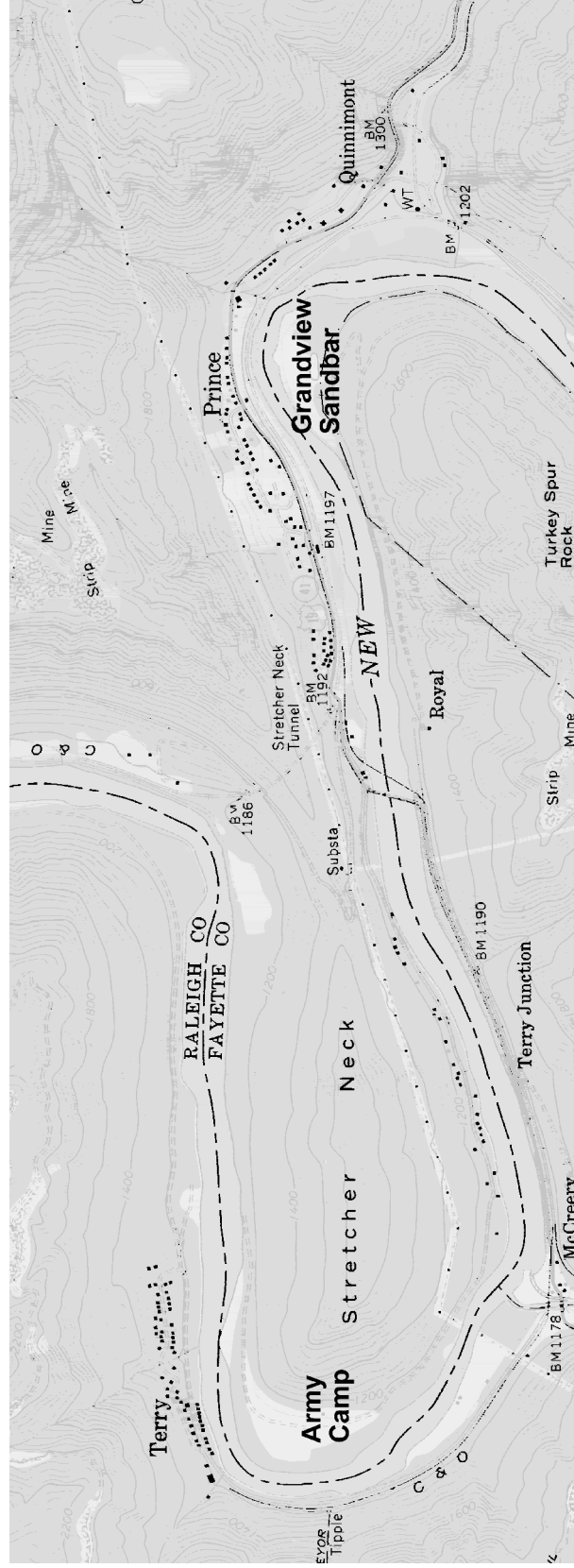


Figure 1: Location of Proposed Development Areas. Detail from Prince Quadrangle, West Virginia 7.5 Minute Series (Topographic).

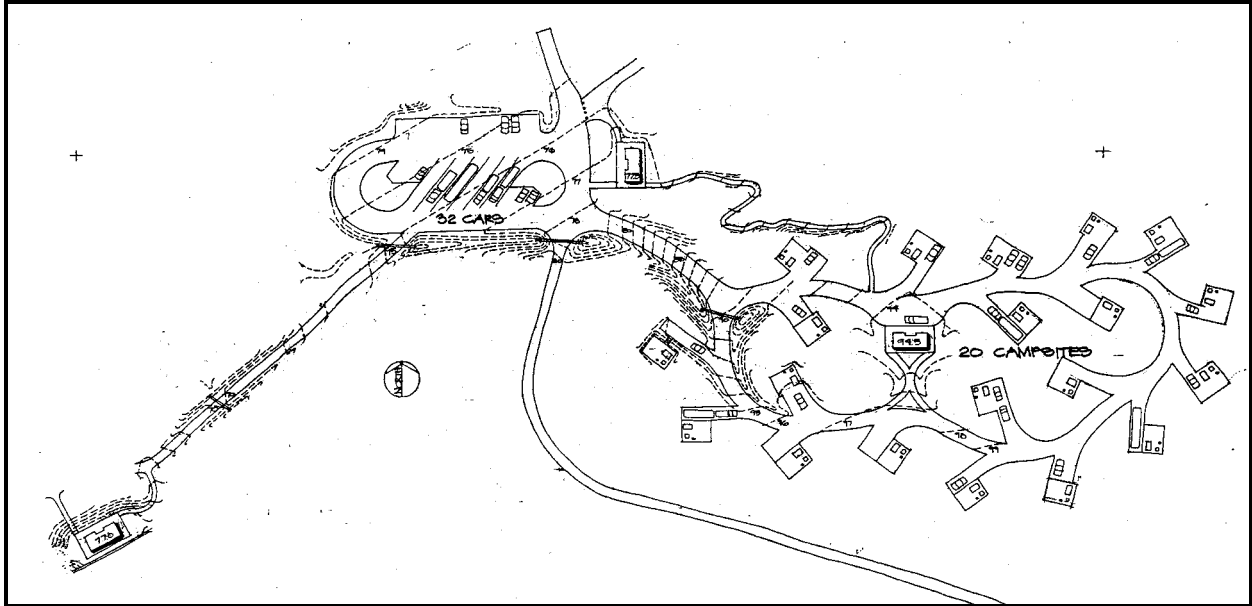


Figure 2: Proposed Improvements at Grandview Sandbar.

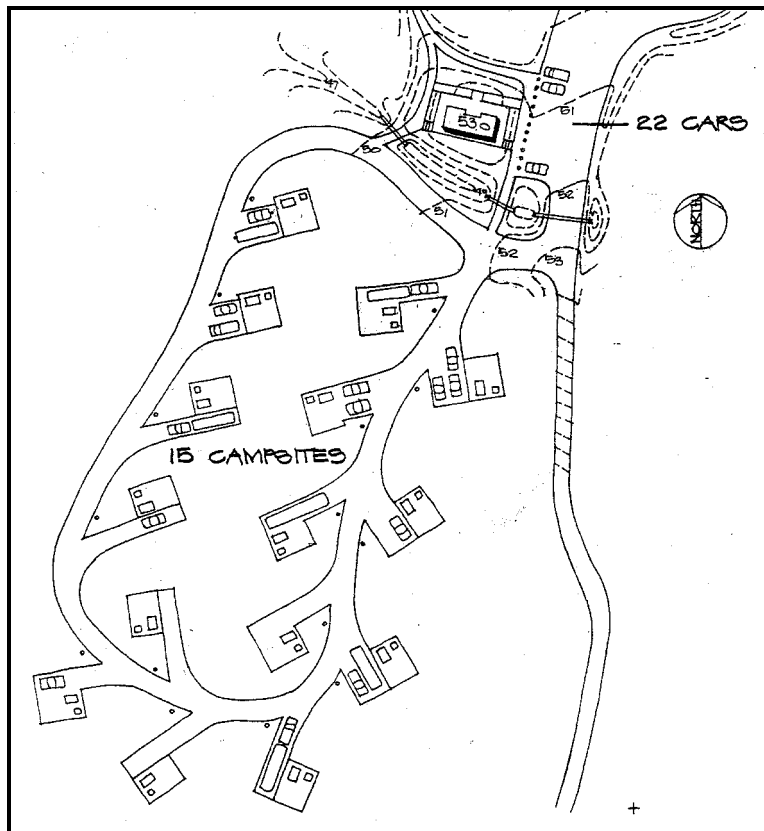


Figure 3: Proposed Improvements at Army Camp.

Geological, Topographic, and Cultural Overview

Geology: New River Gorge National River lies within the Allegheny section of the Appalachian Plateau province which is characterized by “a regular succession of high sharp ridges separated by deeply indented and V-shaped valleys” (Marshall and Associates 1981: 7). The province is dominated by Mississippian and Pennsylvanian bedrock strata, composed of clastic conglomerates, sandstones, shales, and interbedded coal seams underlain by crystalline Precambrian basement rock. The New River has carved through these strata (by erosion out pacing uplifting) to form the New River Gorge.

Topography: The New River Gorge ranges in depth from 600-800 feet at its south end at Hinton to 1200 feet at Meadow Creek, to 1400 feet deep at Grandview Sandbar (the project area). Flood plains and alluvial terraces are underlain by sandstone which were subject to infrequent flooding prior to construction of the Bluestone Dam in 1950.

Previous Research: Archeological resource investigations within portions of the park were conducted in 1980 by Paul D. Marshall and Associates and in 1992 by Stevens and Gold of John Milner Associates. Two prehistoric archeological resources within the gorge were identified by the former survey near the project areas:

1) 46Rg29 (2½ miles east of Grandview Sandbar) - “Harrah” site, located at the confluence of Mill Creek and the New River at a lowland upper terrace at 1200 fasl. Identified by surface collection in a plowed garden, it extends for 80 by 100 meters. Classified as a “limited activity camp”, it contained 7 chert flakes (Marshall 1981:353).

2) 46Fa157 (one-quarter mile north of Army Camp) - Unnamed site located on the upper terrace at 1160 fasl. Identified by surface survey in a cut, it is 8-10 cm. deep and contained 4 chert flakes (one use modified). Classified as a “limited activity camp” (Marshall 1981:154,) its dimensions are undetermined.

These sites are characteristic of the known resources within the gorge. Identified by surface examination, their dimensions are unknown because terrain, accessibility, and colluvial deposits make traditional subsurface testing extremely difficult. As a result, subsurface features or stratified sites are unknown. Diagnostic materials recovered from other sites indicate continuous occupation from the Late Archaic period.

On the plateau above the gorge, some 1200 feet above the project area, eleven prehistoric sites have been identified (Stevens and Gold 1994:2, and Fuerst 1981). Sites 46Rg138, 46Rg140, 46Rg145, 46Rg146, 46Rg141, 46Rg142, and 46Rg147 all contain fewer than twenty lithic fragments, with 46Rg139 containing 25. Several contain fire-cracked rock which may suggest the presence of fire-pits (Stevens and Gold 1994:7-15). Sites 46Rg26, 46Rg27, and 46Rg28 represent a stratified rock shelter, a Middle Archaic Camp, and a possible camp respectively, all located on the plateau above the project area (Fuest 1981).

Investigations at Grandview Sandbar

Proposed improvements at Grandview Sandbar include construction of a 32-car parking area, twenty campsites, and three comfort stations (Figure 2). The proposed developments are located on the first river terrace (parking lot and middle comfort station), the transition from the first to second terraces (western comfort station) and the second river terrace (eastern comfort station and campsites). The first terrace is essentially flat and had been used for surface mining of sand deposits. It is currently used as a parking area and river access facility. The entire area has evidence of quarrying activity with numerous spoil piles and shallow excavations. The first terrace also appears highly vulnerable to scouring and overbanking.

Visual examination of the project area indicted numerous berms, depressions, roads, and rock debris from the mining activity, especially in the area of the proposed middle comfort station (Figure 4). The proposed parking area will require no grading and will have no effect on any archeological resources, as will the campsites on the eastern portion of the development area. Sub-surface impacts will be associated only with construction of the proposed comfort stations, with construction of foundations and pit toilets impacting to the depth of five feet. As such, archeological testing was conducted only in those areas.

Middle Comfort Station: A single archeological test was conducted at the location of the proposed middle comfort station (Figure 5). Evidence of previous disturbances suggested it possessed little potential for archeological resources.

Test 1: Located in the center middle comfort station on the first terrace, it had three strata:

- 1) Dark grayish brown (Munsell color 10YR 4/2) sandy loam from 0 to 0.5 feet below surface (fbs).
- 2) Dark grayish brown (Munsell color 10YR 4/2) sandy loam with dense (greater than 75% of volume) small (between 0.1 and 0.2' dia.) stones from 0.5 to 1.0 fbs.
- 3) Dark brown (Munsell color 10YR 3/3) sandy loam with occasional large (greater than 0.5' dia.) stones from 1.0 to 2.6 fbs.

No artifacts were recovered from the test. Examination of the stratigraphy indicated that this location had been subject to repeated scouring evidenced by the small stones lying upon the sterile stratum containing large stones. This area was determined to be unlikely to contain intact cultural sequences and further testing of this area was abandoned.



Figure 4: View of Location of Proposed Middle Comfort Station Looking North.

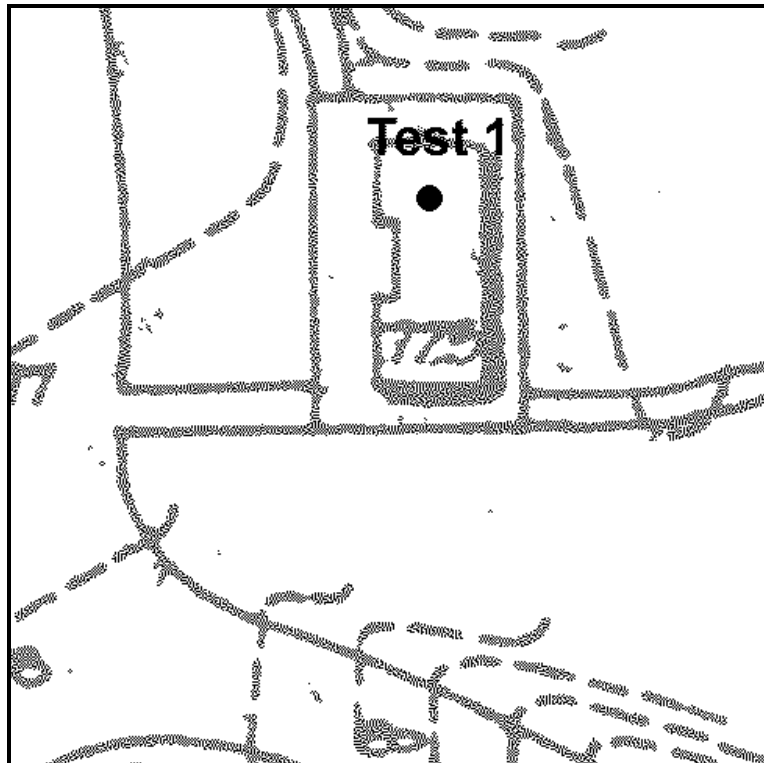


Figure 5: Plan of Proposed Middle Comfort Station Showing Location of Archeological Test.

Western Comfort Station: The proposed western comfort station is located on the transition

between the first and second river terraces in an area that may have been impacted by surface mining, evidenced by a shallow depression. It was examined by four shovel tests (Figure 6):

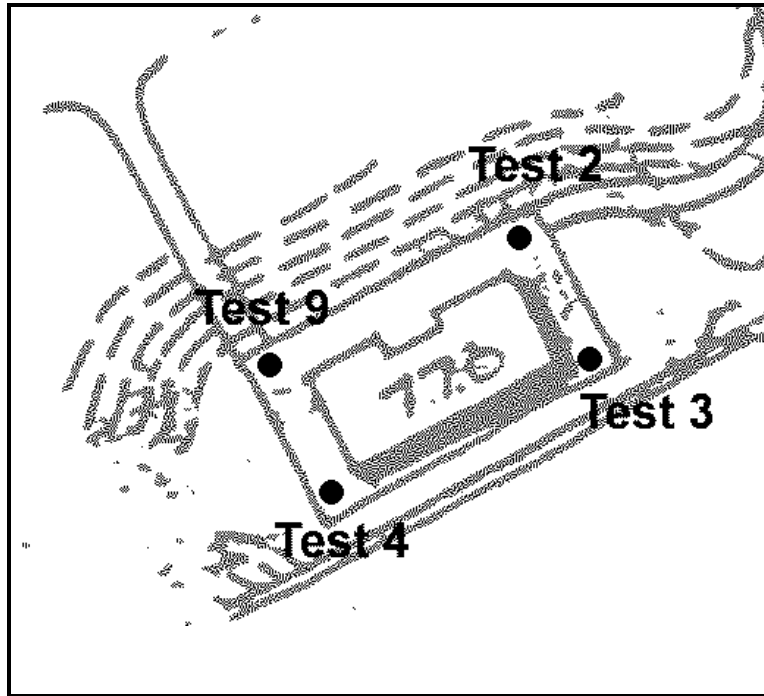


Figure 6: Proposed Middle Comfort Station at Grandview Sandbar Showing Location of Archeological Tests.

Test 2: Located at the northeast corner of the westernmost comfort station, it had four strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) sandy loam from 0 to 1.2 fbs.
- 2) Brown (Munsell color 10 YR 5/3) sandy loam from 1.2 to 1.4 fbs.
- 3) Dark brown (Munsell color 10YR 3/3) sand from 1.4 to 2.6 fbs grading into:
- 4) Brown (Munsell color 10YR 4/3) sand from 2.6 to 4.0 fbs.

Test 3: Located at the southeast corner of the westernmost comfort station, it had two strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) sandy loam from 0 to 0.6 fbs.
- 2) Dark yellowish brown (Munsell color 10 YR 4/4) sand from 0.6 to 2.4 fbs. Test suspended at large rock (>1.5' dia.) in base of test.

Test 4: Located at the southwest corner of the westernmost comfort station. It had four strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) sandy loam from 0 to 0.8 fbs.
- 2) Brown (Munsell color 10 YR 5/3) sand from 0.8 to 3.0 fbs.
- 3) Brown (Munsell color 10YR 4/3) densely packed sand from 3.0 to 3.7 fbs.
- 4) Yellowish brown (Munsell color 10YR 5/4) sand from 3.7 to 4.25 fbs.

Test 9: Located at the northwest corner of the westernmost comfort station, it had three strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) sandy loam from 0 to 0.4 fbs.
- 2) Dark grayish brown (Munsell color 10YR 4/2) sand from 0.4 to 1.0 fbs.
- 3) Brown (Munsell color 10YR 4/3) sand from 1.0 to 3.2 fbs.

No artifacts were recovered from any of the tests.

Examination of the soil strata indicates that the area has remained relatively undisturbed, representing the natural succession of increasingly organic sands from the bottom to the top, suggesting surface stability. This is expected because of its higher elevation along the transition from the first to second terraces. Testing indicated that no archeological resources exist in the proposed location of the western comfort station.

Eastern Comfort Station: The proposed eastern comfort station is located on the second river terrace, some thirty feet above the river. The terrace extends east of the proposed development, and is some one hundred feet wide before dropping to the first terrace to the north or ending in a steep upward slope to the south. The proposed construction is within an area impacted by sand or gravel mining and is adjacent to a circular road-like feature (Figure 7). Archeological testing at this location indicated the presence of a prehistoric archeological site and identified a new area for construction of the comfort station that will not impact this site (Figure 8).

Test 5: Located at the southeast corner of the eastern comfort station, it had three strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) humic loam with dense (>60% of volume) small (0.1 to 0.2' dia.) stones from 0 to 1.1 fbs.
- 2) Brown (Munsell color 10YR 4/3) sandy loam from 1.1 to 1.5 fbs. This stratum contained a chert biface thinning flake.
- 3) Dark grayish brown (Munsell color 10YR 4/2) sand from 1.5 to 3.0 fbs.

Stratum 2 reflects a buried A horizon beneath a colluvial deposit. The presence of the biface thinning flake indicates a prehistoric occupation.

Test 6: Located at the northwest corner of the proposed comfort station, within a circular feature (a berm) resulting from quarrying activities, it had two strata:

- 1) Mottled soils from 0 to 1.8 fbs.
- 2) Dark grayish brown (Munsell color 10YR 4/2) sand from 1.8 to 3.0 fbs.



Figure 7: Location of Proposed Eastern Comfort Station View Looking South.

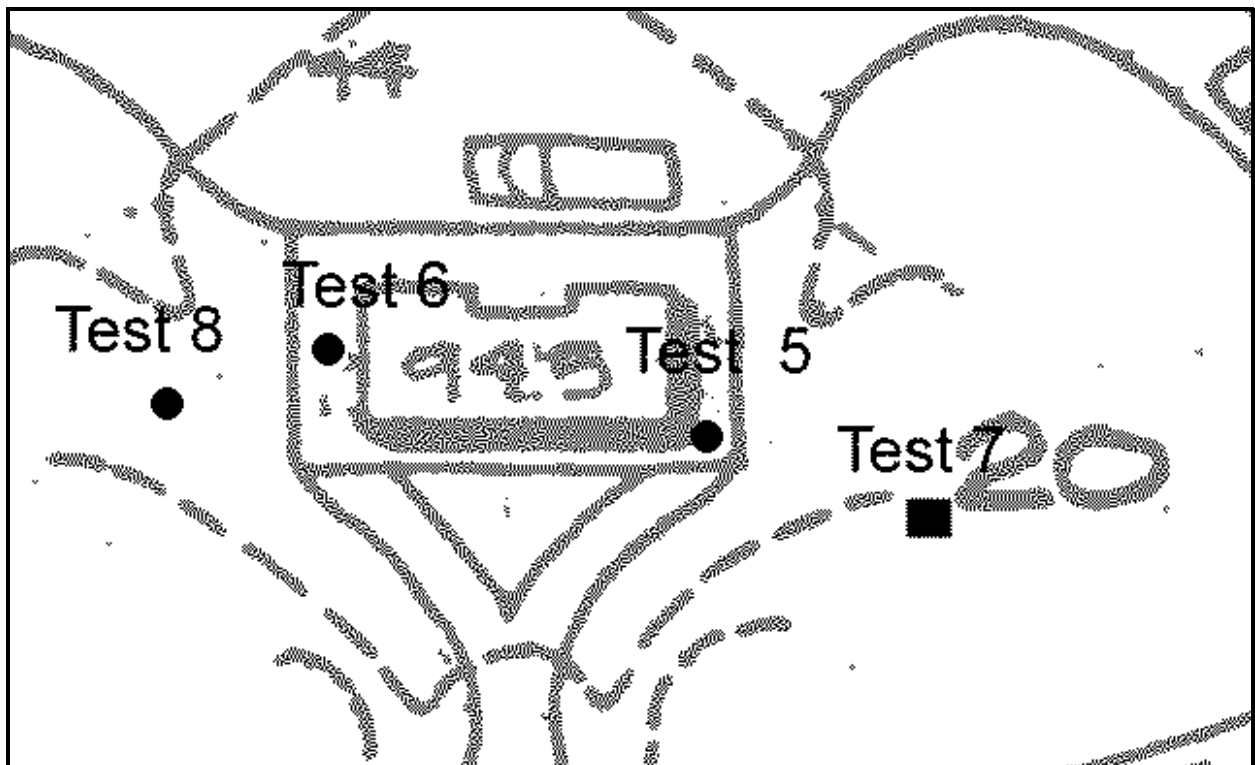


Figure 8: Plan of Eastern Comfort Station Showing Location of Archeological Tests.

No artifacts were recovered from Test 6. The buried A horizon was not present, indicating disturbance from sand quarrying.

Test 7: Located ten feet south of Test 5, it was designed to sample a larger area of the buried A horizon. This test measured 3.0 feet square. It had three strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) humic loam with dense small stones from 0 to 0.5 fbs.
- 2) Brown (Munsell color 10YR 4/3) sandy loam from 0.5 to 1.0 fbs. This stratum contained a chert flake and a fire-cracked rock.
- 3) Dark grayish brown (Munsell color 10YR 4/2) sand from 1.0 to 1.7 fbs.

Test 7 possessed an identical stratigraphic sequence to Test 5. The colluvial deposit was less thick, suggesting that the buried A horizon is somewhat closer to the surface to the east and south of the test. The test also confirmed that in this area, the buried A horizon contained prehistoric artifacts and the identification of an archeological site is justified.

Test 8 was located in the south center portion of the circular berm or disturbance feature. It had three strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) humic loam with dense small stones from 0 to 0.7 fbs.
- 2) Dark brown (Munsell color 10YR 3/3) sandy loam from 0.7 to 1.0 fbs (the buried A horizon).
- 3) Brown (Munsell color 10 YR 5/3) sand from 1.0 to 3.0 fbs.

No artifacts were recovered from this test. Test 8 indicated that the buried A horizon, where not impacted by quarrying operations, is present across the upper terrace. The test also indicated that the A horizon does not uniformly contain archeological resources and that the site identified in tests 5 and 7 does not extend into this portion of the proposed development.

Archeological testing at the proposed location of the Eastern Comfort Station indicated the presence of a prehistoric archeological site buried beneath a colluvial deposit which is one to one-half foot thick. This colluvial deposit is stony and quite dense and will buffer the site from impacts associated with development of the camping pads, which will be constructed on imported fill. The limited testing conducted on the site does not allow for associating a specific temporal period for its occupation. The site does not extend to the west, but based upon topographic evidence, it may extend an unknown distance to the east and south along the terrace. It is recommended that additional evaluation of this site for possible nomination to the National Register of Historic Places be conducted when the park conducts its Archeological Overview and Assessment. For the purposes of the proposed development project, the site will not be effected if the eastern comfort station is moved to the recommended location.

Investigations at Army Camp

Army Camp is located at the western end of Stretcher Neck, the peninsula formed by a loop of the New River. Landforms at Army Camp include a lower terrace several feet above the river's flow, where the proposed project is located and an upper terrace containing the remains of a WWII amphibious training base. The 1981 survey identified 48Fa157 one-quarter mile north of the project area on the upper terrace at 1160 fasl. Identified by surface survey in a cut, it is 8-10 cm. deep and contained 4 chert flakes (one use modified). Classified as a "limited activity camp" (Marshall 1981:154) its dimensions are undetermined. Previous development in the project area includes an unpaved loop road and parking pullouts. Groundcover consists of woody brush growing from alluvial sand, the latter containing numerous medium-sized (.5 ft. Diameter) water-worn cobbles. Before construction of the Bluestone Dam, the area was clearly frequently overwashed from river flooding. Proposed developments at Army Camp include construction of campsite pads on imported fill material and construction of a comfort station measuring 20 by 30 feet and requiring excavation for a foundation and composting toilet units some five feet deep.

Archeological testing was conducted at the proposed location of the comfort station. Four tests were excavated (Figure 9):

Test 10: Located at the southwest corner of the comfort station, it had two strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) sandy loam with dense small water-worn stones from 0 to 0.7 fbs.
- 2) Brown (Munsell color 10YR 4/3) sand from 0.7 to 1.2 fbs where testing was suspended due to interlaced large (>0.75') stones. These appeared water-worn.

Test 1: Located at the northwest corner of the comfort station, it had two strata:

- 1) Very dark grayish brown (Munsell color 10YR 3/2) sandy loam with medium-sized (0.4 - 0.7' dia.) stones from 0 to 0.5 fbs.
- 2) Dark brown (Munsell color 10YR 3/3) sand with large water-worn stones from 0.5 to 1.5 fbs. Test was suspended at a large (>1.5' dia.) stone that covered the entire unit.

Test 12: Located at the northeast corner of the proposed comfort station, it had three strata:

- 1) Dark grayish brown (Munsell color 10YR 4/2) sandy loam with small (>0.2' dia.) stones from 0 to 0.6 fbs.
- 2) Very dark grayish brown (Munsell color 10YR 3/2) sand with dense medium-sized (0.4 - 0.7' dia.) water-worn stones from 0.6 to 1.0 fbs.
- 3) Brown (Munsell color 10YR 4/3) sand with medium-sized, densely packed stones from 1.0 to 1.5 fbs.

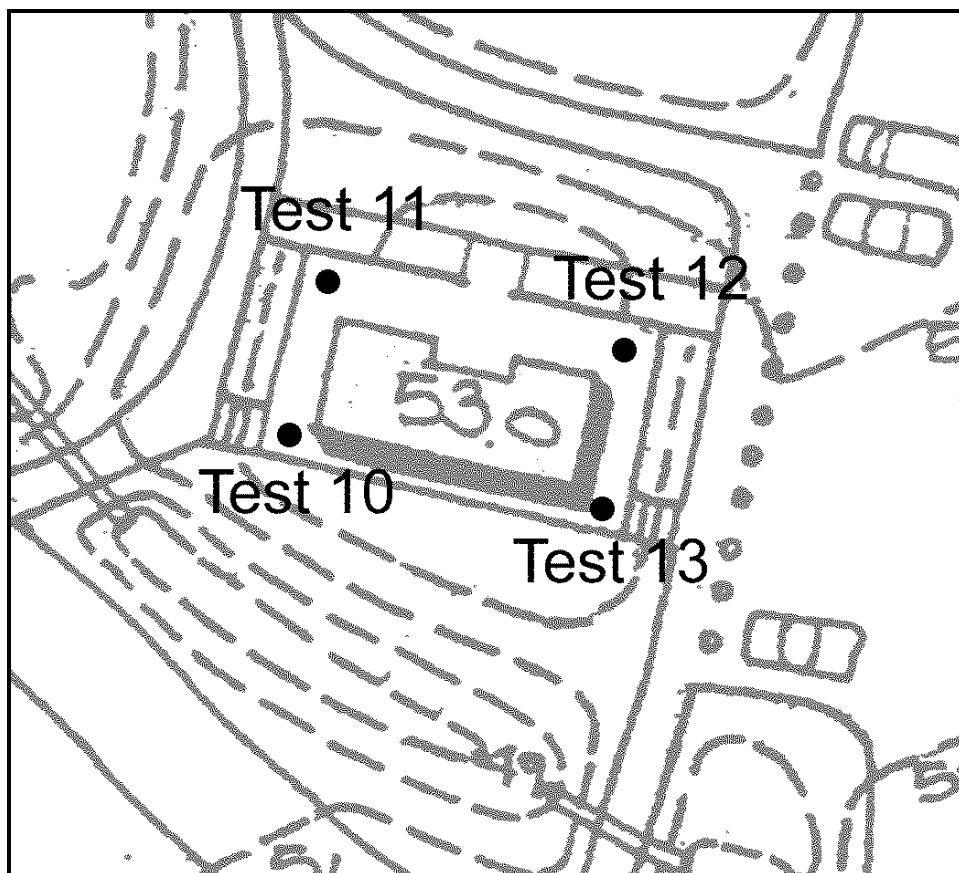


Figure 10: Plan of Proposed Army Camp Comfort Station Showing Location of Archeological Tests.

Test 13: Located at the southeast corner of the proposed comfort station, it had three strata:

- 1) Dark grayish brown (Munsell color 10YR 4/2) sandy loam with small (>0.2' dia.) stones from 0 to 0.6 fbs.
- 2) Very dark grayish brown (Munsell color 10YR 3/2) sand with dense medium-sized (0.4 - 0.7' dia.) water-worn stones from 0.6 to 1.0 fbs.
- 3) Brown (Munsell color 10YR 4/3) sand with medium-sized, densely packed stones from 1.0 to 1.5 fbs.

Evaluation of the stratigraphy identified in the archeological tests indicates that the area had experienced considerable scouring and redeposition of water-borne materials in the recent past. Although this ground surface may have experienced minor periods of stability in the prehistoric past, the landform and associated stratigraphy would not have favored site formation. As a result, the proposed development project will have “no effect” on archeological resources.

Summary and Conclusions

Archeological testing at two proposed development areas within New River Gorge National River identified a new prehistoric archeological site on the upper terrace at Grandview Sandbar. Additional testing identified an alternate location for proposed developments that will result in “no effect” on this resource. It is recommended that this site be evaluated for eligibility to the National Register of Historic Places when the park’s Overview and Assessment project is conducted. No archeological resources were identified at Army Camp. No additional archeological activities are recommended, provided that the alternate location for the proposed eastern comfort station at Grandview Sandbar is selected for construction.

Acknowledgements

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